

REMARKS

This paper is responsive to an Office Action dated December 30, 2004. Prior to this response, claims 1, 4-14, 17-22, and 24-33 were pending. Claims 1, 4-14, 17-22, and 24-33 remain pending.

In Section 4 of the Office Action claims 1, 4, 6, 12-14, 17-22, 24-26, and 32-33 have been rejected under 35 U.S.C. 102(b) as anticipated by Clee et al. ("Clee"; US 6,029,248). With respect to claims 1, 14, and 22, the Office Action states that Clee discloses an invention that receives configuration bytes addressed to device registers, and uses a lock register to prevent the loading of configuration data into the configuration registers. This rejection is traversed as follows.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The motivation for Clee's invention comes from a desire to save energy, by powering-down a printer or computer when it is not in use (col. 1, ln. 17-32). Specifically, Clee describes a printer with an integrated circuit 10 that implements a locking system through the use of a locking register 14 (col. 2, ln. 2-9). After receiving a response from the microcontroller 17, the integrated circuit asserts the power on/off line 23, while simultaneously locking the locking register 14. "The integrated circuit 10 will not execute any instructions issued by the microcontroller 17 when the locking register 14 is locked" (col. 2, ln. 10-24). The integrated circuit 10 restores power by de-asserting the power on/off line

23. Upon reinitialization, the microcontroller writes an unlock sequence to the locking register (col. 2, ln. 25-38).

As stated above, Clee's locking register prevents the integrated circuit from executing instructions from the microcontroller. Clee does *not* describe a locking register that prevents data from being loaded into a register. Clee mentions that the integrated circuit includes registers 15 that "perform a variety of functions" (col. 2, ln. 8). However, except for this brief statement, Clee never mentions these registers again. Alternately stated, Clee does not mention any registers that can be loaded, locked, or unlocked in response to the state of the locking register.

Clee teaches an IC that either responds, or fails to respond to a microprocessor in response to the locking register state. The invention of claims 1, 14, and 22 recites a device that loads, or fails to load configuration data into a configuration register in response to the state of the locking register. Clee does not teach that the loading of registers can be responsive to a locking register state. Therefore, Clee does not explicitly describe every element of the claims 1, 14, and 22, as is required to support a case of anticipation. Claims 4, 6, and 12-13, dependent from claim 1, claims 17-21, dependent from claim 14, and claims 24-26 and 32-33, dependent from claim 22, enjoy the same distinctions from the cited prior art, and the Applicant respectfully requests that the rejections be removed.

In Section 22 of the Office Action, claims 7-11 and 27-31 have been rejected as unpatentable under 35 U.S.C. 103(a) with respect to Clee. With respect to claims 7 and 27, the Office Action acknowledges that Clee fails to disclose a second locking register, but states that it would have

been obvious to implement a second locking register, once to use of a first locking register was known. This rejection is traversed as follows.

An invention is unpatentable if the differences between it and the prior art would have been obvious at the time of the invention. As stated in MPEP § 2143, there are three requirements to establish a *prima facie* case of obviousness.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck* 947 F.2d 488, 20 USPQ2d, 1438 (Fed. Cir. 1991).

With respect to the first *prima facie* requirement to support a case of obviousness, there must be a motivation expressed in the reference, or generally known in the art, to modify the reference to use the locking register to control the loading of data into a configuration register. However, there is no teaching in Clee that his locking register can be used for such a purpose. In fact, Clee does not give any specific details as to how his locking register operates. That is, Clee does not describe exactly how the locking register prevents the integrated circuit from executing microprocessor instructions. Since it was not generally known in the art to use a locking register to prevent the loading of data into a configuration register, and since Clee does not suggest such a use, there can be no motivation to modify Clee in such a manner.

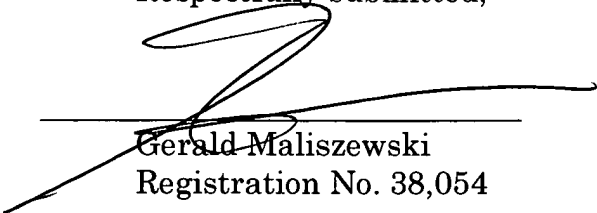
With respect to the second *prima facie* requirement, there is “no reasonable expectation of success in the present invention”. Even if a skilled practitioner were given the Clee invention as a starting point, there is no reasonable expectation that this practitioner would come up with the idea of using a locking register to prevent a configuration register from being loaded with data.

With respect to the third *prima facie* obviousness requirement, as mentioned above in response to the anticipation rejection, Clee does not explicitly describe or suggest every element of claims 1 and 22. That is, Clee does not teach that a locking register can be used to prevent data from being loaded into an associated configuration register. Therefore, Clee does not explicitly describe all the limitations of the base claims, from which the rejected claims depend. Neither does Clee suggest any modifications that make claim 1 and 22 obvious. Claims 7-11, dependent from claim 1, and claims 27-31, dependent from claim 22, enjoy the same distinctions from the cited prior art as the base claims, and the Applicant requests that the rejections be removed.

It is believed that the application is in condition for allowance and reconsideration is earnestly solicited.

Respectfully submitted,

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